

3D Blaster Annihilator 2 Installation Guide

Contents

Introduction	1
Preliminary Step for Windows 95 Users	2
Installing Your Graphics Card	3
Installing Software	5
Changing Settings.....	10
Getting More Information	11
Technical Specifications	12
Troubleshooting.....	15

Introduction

The 3D Blaster™ Annihilator 2 is an exciting 2D/3D video accelerator that uses the ultimate GeForce2 GTS™ 256-bit 3D processor from NVIDIA™. Featuring four independent pixel pipelines and the NVIDIA™ Shading Rasterizer (NSR), the 3D Blaster™ Annihilator 2 performs per-pixel shading and complex pixel operations in a single pass and delivers fill rates of up to 1.6 Gigatexels per second.

The GeForce2 GTS also has 2nd Generation Transform and Lighting (T&L) engines. T&L technology that gives the 3D Blaster™ Annihilator 2 the processing power of 25 million triangles per second. Configured with 64MB of Double Data Rate (DDR) memory effectively operating at 333MHz, the Annihilator 2 gives you 5.3GB/sec of dedicated graphics memory bandwidth. The results are stunning visual quality with incredible performance.

Serial and Model Numbers

Your card's serial and model numbers can be found on the back of the card. Record the serial and model number below. This information may be useful in the event that you need to contact our Technical Support staff for troubleshooting or your dealer for warranty service.

Hardware	Product Codes	Numbers
3D Blaster Annihilator 2	Serial Number	
	Model Number	

Before You Begin

The README file on the CD-ROM contains information that may not have been available at the time of printing. Read the file before you continue.

Minimum System Requirements

- ☐ IBM® PC 100% compatible
- ☐ Pentium® II, AMD-K6® class processors or higher; operating at 266MHz or faster.
- ☐ 64 MB RAM
- ☐ 15 MB available hard disk space for driver installation
(other included software requires additional disk space)
- ☐ AGP 2.0 compliant slot
- ☐ CD-ROM drive installed
- ☐ Windows 95, Windows 98, Windows Me, Windows NT 4.0 (with Service Pack 5),
or Windows 2000
- ☐ Standard VGA monitor or multi-frequency VGA monitor

Updating Drivers

To download the latest drivers for 3D Blaster Annihilator 2, visit Creative's Web site:
www.3dblaster.com

Preliminary Step for Windows 95 Users

Windows automatically detects new hardware and starts the software installation procedure upon startup. Since you need to know the Windows 95 version number during installation, verify your Windows version number before installing the graphics card.

To verify your Windows 95 version number:

1. Click Start on the Windows Taskbar, select Settings, and click on Control Panel.
2. In the Control Panel window, double-click the System icon. The Windows 95 version number is displayed on the General tab page of the System Properties dialog.
3. Note the version number. The following are the possible Windows 95 version numbers:
 - ☐ 4.00.950 (Retail version)
 - ☐ 4.00.950A (Retail version)
 - ☐ 4.00.950B (OSR version 2 and 2.1)
 - ☐ 4.00.950C (OSR version 2.5)

Installing Your Graphics Card



If you are replacing a graphics adapter with 3D Blaster Annihilator 2, remove the existing graphics adapter.

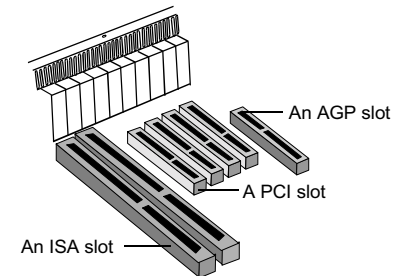
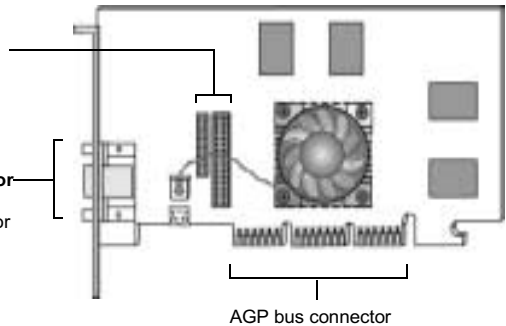
The illustration to the right shows the connectors on the 3D Blaster Annihilator 2.

To install the graphics card:

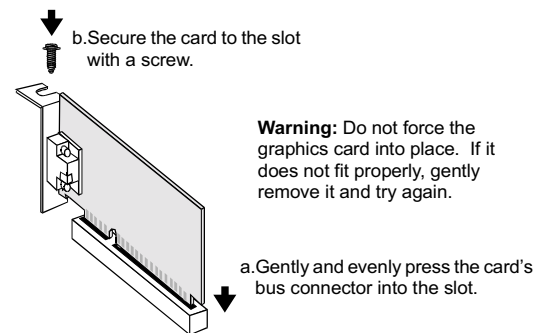
1. Turn your computer off and all peripheral devices.
2. Disconnect the power cord from the wall outlet.
3. Touch any metallic surface on your computer to discharge any static electricity.
4. Remove the computer cover.
5. Locate a the AGP expansion slot. The figure to the right shows the various types of expansion slots.
6. Remove the metal plate from the AGP slot. Keep the screw and metal plate for future use.
7. Align the bus connector of the graphics card with the expansion slot.

Video Expansion connectors
Connect to a video expansion devices.

VGA Out connector
Connects to your monitor via a monitor cable.

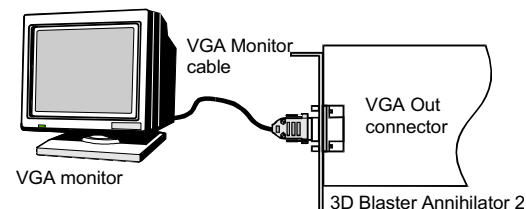


8. Press the card's bus connector gently and evenly into the slot, making sure that the bus connector comes into full contact with the slot. Then, secure the card to the computer casing with a screw. See the figure to the right.



If you are using a multi-frequency monitor, you may need a special 15-pin DIN VGA cable. If your multi-frequency monitor allows you to switch between 'TTL' and 'analog' operation modes, set the switch to 'analog'. For details, refer to your monitor's manual.

9. Connect the monitor cable to the VGA Out connector of the graphics card, as shown in the figure to the right.
10. Replace the computer cover and plug the power cord back into the wall outlet.



Installing Software

Windows 95 (Retail version)

After installing the graphics card, you can install the software. The 3D Blaster Annihilator 2 CD contains the following:

- ☐ Drivers for Windows 95, Windows 98, Windows Me
- ☐ Drivers for Windows NT 4.0 and Windows 2000
- ☐ Creative Enhanced BlasterControl™ for Windows 95 and Windows 98, Windows Me, Windows NT 4.0, and Windows 2000
- ☐ Creative Lava!™ Music Video Player
- ☐ Media Ring Talk™

1. Turn on your computer. Windows 95 automatically detects the graphics card.
A *New Hardware Found* message appears, informing you that a display adapter has been detected.
2. When a dialog similar to the figure shown to the right appears, ensure that the *Driver from disk provided by hardware manufacturer* option is selected.
3. Click the OK button.
4. Insert the 3D Blaster Annihilator 2 CD into your CD-ROM drive.
5. In the Install From Disk dialog, type **D:\GRAPHICS\ENGLISH\WIN9XDRV** (D: represents your CD-ROM drive) and click the *OK* button.
6. If prompted to select drivers, select the *Creative GB0012* drivers. The drivers are copied to your computer's hard disk drive.
7. When prompted to restart your system, click the *Yes* button.
8. After the computer restarts, install the applications. Click *Start* on the Windows Taskbar and click on *Run*.
9. In the *Run* dialog, type **D:\GRAPHICS\ENGLISH\SETUP.EXE** and click the *OK* button.
10. Follow the instructions on the screen to complete the setup.
If you do not install all the applications now, you can install them later.



Windows 95 (OSR version 2.0 and later)

1. Turn on your computer. Windows 95 automatically detects the graphics card. A *New Hardware Found* message appears, informing you that a display adapter has been detected.
2. When a dialog similar to the figure to the right appears, click the *Next* button.
3. Click the *Other Locations* button when it appears in the *Update Device Driver Wizard* dialog.
4. Insert the 3D Blaster Annihilator 2 CD into your CD-ROM drive.
5. In the Select Other Location dialog, type **D:\GRAPHICS\ENGLISH\WIN9XDRV** (**D:** represents your CD-ROM drive) and click the *OK* button.
6. In the *Update Device Driver Wizard* dialog, click the *Finish* button.
7. In the *Insert Disk* message, click the *OK* button.
8. In the *Copying Files* dialog, type **D:\GRAPHICS\ENGLISH\WIN9XDRV** and click the *OK* button.
The drivers are copied to your system.
9. In the *Update Device Driver Wizard* dialog, click the *OK* button.
10. When prompted to restart your system, click the *Yes* button.
11. After the system has restarted, proceed to install the applications. Click *Start* on the Windows Taskbar and click on *Run*.
12. In the Run dialog, type **D:\GRAPHICS\ENGLISH\SETUP.EXE** and click the *OK* button.
13. Follow the instructions on the screen to complete the setup.
If you do not install all the applications now, you can install them later.



Windows 98

1. Turn on your computer. Windows 98 automatically detects the graphics card. An *Add New Hardware Wizard* message appears, informing you that a display adapter has been detected.
2. When a dialog similar to that shown on the right appears, select the option *Display a list of all the drivers in a specific location, so you can select the driver you want*.
3. Click the *Next* button.
4. Insert the 3D Blaster Annihilator 2 CD into your CD-ROM drive.
5. In the Models list, click the *Have Disk* button.
6. In the *Install From Disk* dialog, type **D:\GRAPHICS\ENGLISH\WIN9XDRV** (**D:** represents your CD-ROM drive) and click the *OK* button.

If you are installing 3D Blaster Annihilator 2 as a second or subsequent card utilizing Windows 98's multi-monitor capability, an *Update Driver Warning* message may appear telling you that the driver you selected may not work correctly. You **must** click the *Yes* button to confirm that you want to use the selected driver. Otherwise, the system will install the wrong driver and will not recognize the card as a 3D Blaster Annihilator 2 card (for details, see "Windows 98 and Windows Me Multi-Monitor Display Problems" on page 15).
7. In the *Models* list of the *Select Device* dialog, select the *Creative GB0012* entry and click *OK*.
8. Click the *Next* button.
9. Click the *Finish* button to copy the drivers to your computer's hard disk drive.
10. When prompted to restart your system, click the *Yes* button.
11. After the system has restarted, proceed to install the applications. Click *Start* on the Windows Taskbar and click on *Run*.
12. In the Run dialog, type **D:\GRAPHICS\ENGLISH\SETUP.EXE** and click the *OK* button.
13. Follow the instructions on the screen to complete the setup.

If you do not install all the applications now, you can install them later.



Windows Me

1. Turn on your system.
2. Windows Me automatically detects the graphics card.
An *Add New Hardware Wizard* message box appears, informing you that a display adapter has been detected.
3. Windows will automatically install the **Standard PCI Graphics Adapter (VGA) (Microsoft) (6-8-2000)**.
If you are installing 3D Blaster Annihilator 2 as a second or subsequent card to make use of Windows Me's multi-monitor capability, you will see an *Update Driver Warning* message telling you that the driver you have selected may not work correctly. You **must** click the *Yes* button to confirm that you want to use the selected driver. Otherwise, the system will install the wrong driver and will not recognize the card as a 3D Blaster Annihilator 2 card (for details, see "Windows 98 and Windows Me Multi-Monitor Display Problems" on page 15).
4. Click the *Next* button.
5. Click the *Finish* button.
6. When prompted to restart your system, click the *Yes* button.
7. After the system has restarted, proceed to install the applications. Click *Start* and click on *Run*.
8. Insert the 3D Blaster Annihilator 2 CD into your CD-ROM drive.
9. In the *Run* dialog box, type **D:\GRAPHICS\ENGLISH\SETUP.EXE** and click the *OK* button.
10. Follow the instructions on the screen to complete the setup.
If you do not install all the applications now, you can install them later.

Windows NT 4.0 (Service Pack 5)

1. Turn on your computer.
2. Click *Start* on the Windows Taskbar and click on *Run*.
3. In the *Run* dialog, type **D:\GRAPHICS\ENGLISH\SETUP.EXE** and click the *OK* button.
4. Follow the instructions on the screen to complete the setup.
If you do not install all the applications now, you can install them later.
5. If the *Invalid Display Settings* message appears after your system has restarted, click the *OK* button and change the display settings.
For details, see "Changing Settings" on page 10".

Windows 2000

1. Turn on your computer. Windows 2000 automatically detects the graphics card. The *Found New Hardware Wizard* dialog box appears, informing you that a display adapter has been detected.
2. Select the *Search for a suitable driver* option and click the *Next* button.
3. Insert the 3D Blaster Annihilator 2 CD into your CD-ROM drive.
4. In the *Optimal Search Locations* list, check the *CD-ROM Drivers* box and click the *Next* button.
5. The *Driver File Search* results will identify the graphics card as Creative GB0012 and locate the driver files in **D:\GRAPHICS\ENGLISH\WIN2KDRV** location (D: represents your CD-ROM drive). Click the *Next* button.
6. When the *Digital Signature not Found* dialog box appears, click the *Yes* button to continue the installation.
7. When the installation is complete, click the *Finish* button.
8. After the installation is complete, click *Start* on the Windows Taskbar and click *Run*.
9. In the Run dialog box, type **D:\GRAPHICS\ENGLISH\SETUP.EXE** and click on the *Ok* button.
10. Follow the instructions on the screen to complete the setup. If you do not install all the applications now, you can install them later.

Changing Settings

Windows NT 4.0 and Windows 2000

1. Right-click on the Windows desktop, and click *Properties* on the shortcut menu.
2. In the *Display Properties* dialog, click the *Settings* tab.
3. In the *Desktop Area* group, move the slider to set the desired resolution.
4. In the *Color Palette* group, select the desired color. Certain colors may not be available for some display resolutions.
5. In the *Refresh Frequency* group, select the desired refresh rate.
6. To test the settings, click the *Test* button, and then click the *OK* button.
When the Testing Mode dialog re-appears:
 - If the test bitmap is properly displayed, click the *Yes* button.
 - If not, click the *No* button. A warning message is displayed. Click the *OK* button and repeat steps 3 through 6, changing one or more of the settings.
7. Click the *OK* button to close the *Display Properties* dialog.

Windows 95, Windows 98, Windows Me, Windows NT 4, and Windows 2000



- If your monitor has a color temperature control, adjust it to 6500 K for best results.
- When printing to an inkjet printer, use special coated paper.

1. Click *Start* on the Windows Taskbar, select *Programs*, select *Creative*, and click on *BlasterControl Display Center*.
2. In *Display Center*, click the *Tweak* button to start *BlasterControl Tweak Center*.
3. Select the desired settings and click the *OK* button.

You can customize the graphics card's settings for optimal performance with applications. However, if your monitor display exhibits pixel drop (that is, pixels, usually white in color, appear on the screen) or any other abnormal behavior, revert to the factory default settings (see "Troubleshooting" on page 15).

Getting More Information

3D Blaster Annihilator 2

The Help file for 3D Blaster Annihilator 2 gives a brief introduction to the features supported by your graphics card.

To open the Help file for 3D Blaster Annihilator 2:

1. Click *Start* on the Windows Taskbar, select *Programs*, select *Creative*, select *Creative GB0012*, and click on *Creative GB0012 Help*.

Creative BlasterControl

The Help file for Creative BlasterControl shows you how to use the BlasterControl utility to customize your screen resolution, color depth, and refresh rate in Windows.

To open the Help file for BlasterControl:

1. Click *Start* on the Windows Taskbar, select *Programs*, select *Creative*, and click on *BlasterControl Help*.

To open Help topics specific to a BlasterControl module:

1. In the *BlasterControl* module, click the *Show Help Window*  button.

LAVA! Music Video Player

The Help file for LAVA! Player shows you how to use the multimedia player.

To open the Help File for LAVA! Player:

1. Click *Start* on the Windows Taskbar, select *Programs*, select *Creative*, select *Creative LAVA!*, and click on *LAVA! Help*.

Media Ring Talk

The Help file for Media Ring Talk shows how to use the Web telephone.

To open the Help File for Music Ring Talk:

1. Click *Start* on the Windows Taskbar, select *Programs*, select *Media Ring Talk* and click on *Online Help*

Technical Specifications

Graphics Highlights

- ❑ Powered by the NVIDIA GeForce2 GTS™
- ❑ Advanced 256-bit graphics architecture
- ❑ AGP 4X with Fast Writes support (requires motherboard support)
- ❑ Integrated high speed 350MHz RAMDAC
- ❑ 64MB of Double Data Rate (DDR) memory effectively operating at 333 MHz
- ❑ 5.3 GB/second of dedicated graphics memory bandwidth

3D Features

- ❑ Four independent pixel pipelines
- ❑ NVIDIA Shading Rasterizer architecture
- ❑ Renders up to 8 texels per clock cycle
- ❑ Delivers fill rates of up to 1.6 Gigatexel per second
- ❑ 2nd-generation transform and lighting (T&L) engines
- ❑ Processes up to 25 million triangles per second
- ❑ Optimized Direct3D® and OpenGL® acceleration
- ❑ Hardware Full Scene Anti-Aliasing (FSAA)
- ❑ Advanced per-pixel, perspective-correct texturing
 - Shading and lighting
 - Cube environment mapping
 - Projective textures
 - Bump mapping
 - Texture modulation
 - Light and reflection maps
 - Procedural textures
 - Texture compression (DXTC, S3TC)

- ☐ Fog and Depth Cueing
 - Radial or linear
 - Per-vertex or per-pixel

2D Features

- ☐ High performance 2D, GUI, DirectDraw®
- ☐ Screen resolutions up to 2048 x 1536
- ☐ Optimized for 32, 16 and 8-bit per pixel color depths
- ☐ Flicker-free refresh rates up to 240Hz

Video Features

- ☐ Video acceleration for DirectShow®, MPEG1, MPEG2
- ☐ Enhanced motion compensation for full screen, full motion video playback
- ☐ Multi-tap bilinear video scaling and filtering
- ☐ Multiple video windows with hardware color space conversion
- ☐ DVD sub-picture alpha blended compositing
- ☐ Full Plug and Play compliant

Drivers

- ☐ Windows NT 4.0 and Windows 2000 display drivers
- ☐ Windows 95, Windows 98, and Windows Me display driver supporting DirectDraw, Direct3D, DirectVideo, and ActiveX
- ☐ OpenGL ICD for Windows 95 and Windows 98, Windows NT 4.0, Windows 2000.

Utilities

- ☐ Creative Enhanced BlasterControl™
- ☐ Creative Lava!™ Player
- ☐ MediaRing Talk™

Refresh Rates



The refresh rates shown in the table are the highest obtainable and are monitor dependent. Resolutions, pixel depths, and refresh rates are also driver dependent and may not be available for some applications or operating systems.

The refresh rates shown in the table below are supported by different video modes (based on 350 MHz RAMDAC).

Refresh Rates	Color Depth		
Resolution	256 (8-bit)	64k (16-bit)	16.7 million (32-bit)
640x480	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170, 200, 240	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170, 200, 240	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170, 200, 240
800x600	60, 70, 72, 75, 85, 100, 120, 140, 144, 170, 200, 240	60, 70, 72, 75, 85, 100, 120, 140, 144, 170, 200, 240	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170, 200, 240
1024x768	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170, 200, 240	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170, 200, 240	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170, 200
1152x864	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170, 200	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170, 200	60, 70, 72, 75, 85, 100, 120, 140, 150, 170
1280x720	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170	60, 70, 72, 75, 85, 100, 120, 140, 150
1280x960	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170	60, 70, 72, 75, 85, 100, 120, 140, 150
1280x1024	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170	60, 70, 72, 75, 85, 100, 120, 140, 144, 150, 170	60, 70, 72, 75, 85, 100, 120, 140, 150
1600x900	60, 70, 72, 75, 85, 100, 120, 140, 144, 150	60, 70, 72, 75, 85, 100, 120, 140, 144, 150	60, 70, 72, 75, 85, 100, 120
1600x1200	60, 70, 72, 75, 85, 100, 120	60, 70, 72, 75, 85, 100, 120	60, 70, 72, 75, 85, 100
1920x1080	60, 70, 72, 75, 85, 100	60, 70, 72, 75, 85, 100	60, 70, 72, 75, 85
1920x1200	60, 70, 72, 75, 85, 100	60, 70, 72, 75, 85, 100	60, 70, 72, 75, 85
1920x1440	60, 70, 72, 75, 85	60, 70, 72, 75, 85	60, 70, 75
2048x1536	60, 70, 72, 75	60, 70, 72, 75	60

Troubleshooting

System Hangs, Blank Screen or Corrupted Display

After installing 3D Blaster Annihilator 2 and starting your computer, the monitor is blank.

Solutions

Try the following:

- ☐ Turn off your computer and wait a while before turning it on again.
- ☐ Disable any built-in VGA on your motherboard; remove any other video display card from your computer.
- ☐ Check that your 3D Blaster Annihilator 2 is fully and correctly inserted into the expansion slot. Press it firmly and evenly into the slot.
- ☐ Check the pins of your monitor's VGA Input connector—they must not be bent—and see that the connector is properly connected to the VGA Out connector of 3D Blaster Annihilator 2.

Windows 98 and Windows Me Multi-Monitor Display Problems

In a multi-monitor setting, the monitor connected to the 3D Blaster Annihilator 2 remains blank even though it and the drivers have been installed.

Cause

If 3D Blaster Annihilator 2's drivers are not specified during the software installation, the system installs it as a standard display adapter that does *not* support Windows 98 and Windows Me's multi-monitor feature.

Solution

Update the device drivers to 3D Blaster Annihilator 2's drivers:

1. Right-click your desktop, and then click *Properties* on the shortcut menu.
2. In the *Display Properties* dialog, click the *Settings* tab.
3. On the *Settings* tab page, click the *Advanced Properties* button.
4. In the *Advanced Display Properties* dialog, click the *Change* button.
5. In the *Select Device* dialog, click the *Have Disk* button.
6. Insert the 3D Blaster Annihilator 2 CD into your CD-ROM drive.
7. Follow steps 6 through 13 of the procedure in "Windows 98" on page 7, or steps 3 through 10 of the procedure "Windows Me" on page 8, to complete the update.

Other Display Problems



For the resolutions supported by your monitor, refer to its manual.

Monitor display flickers or the screen goes blank after Windows starts.

Cause Your monitor may not support the resolution or refresh rate that you have set.

Solution Use display settings supported by the monitor.

To change the display settings:

1. Restart your system in Windows 98 Safe mode:
 - a. Restart your system and when the message “Starting Windows 98...” appears, press the *F8* key. A list of options such as *Safe Mode* and *Command Prompt Only Mode* appears.
 - b. Select *Safe Mode* and press the *ENTER* key.
2. After your system restarts, right-click the desktop, and click *Properties*.
3. In the *Display Properties* dialog, click the *Settings* tab.
4. Do the following:
 - ☐ The correct monitor must be selected. To check, click the *Change Display Type* button or the *Advanced Properties* button on the *Settings* tab page.
 - ☐ Use a lower refresh rate or the adapter’s default. For details, refer to “Using BlasterControl Display Center” in the BlasterControl Help file.
 - ☐ Lower your monitor’s resolution. You can adjust the color depth and desktop area on the *Settings* tab page.

Monitor display exhibits pixel drop (that is, pixels, usually white in color, appear on the screen) or other abnormal behavior.

Cause The settings that you have selected for your graphics card may be incompatible with one or more games or applications that you are running.

Solution *Use the factory default settings:*

1. Click *Start* on the Windows Taskbar, select *Programs*, select *Creative*, and click on *BlasterControl Display Center*.
2. Click the *Tweak* button to start *BlasterControl Tweak Center*.
3. Click the *Defaults* button.

Beeping Sounds During System Startup

When the system is starting up, there is a series of prolonged beeps.

Cause Your 3D Blaster Annihilator 2 may not be firmly inserted into the slot.

Solution Ensure that the bus connector (tabs) of the graphics card is fully inserted into the expansion slot. Press the card firmly and evenly into the slot. You can also try removing the card and re-inserting it.

Installing Software

In Windows 95 or Windows 98, the installation program for BlasterControl does not run automatically after you have inserted the installation CD into your drive.

Cause The AutoPlay feature in your Windows 95, Windows 98 or Windows Me system is not enabled.

Solution *To install the software from the CD:*

1. Double-click the *My Computer* icon on your Windows desktop.
2. In the *My Computer* window, double-click the *Creative 3D Blaster Annihilator 2* icon.

If the installation program does not run, double-click the *Graphics* folder icon followed by the *English* folder icon. Double-click the *Setup* icon.

3. Follow the instructions on the screen to complete the installation.

Using Software

When you restart Windows, one of the following error messages appears:

- ☐ “BlasterControl will only work on Creative graphics product drivers.
Do you want BlasterControl to be loaded the next time you start Windows?”
- ☐ “BlasterControl will only work on Creative graphics product drivers.”

Cause 3D Blaster Annihilator 2 drivers, required by BlasterControl, may have been replaced by other drivers when you installed DirectX applications.

Solution Re-install or revert to the 3D Blaster Annihilator 2 drivers.

To revert to the drivers:

1. Right-click your desktop, and then click *Properties* on the shortcut menu.
2. In the *Display Properties* dialog, click the *Settings* tab, and then click the *Change Display Type* button or the *Advanced Properties* button.

3. In the *Adapter Type* group or on the *Adapter* tab page, click the *Change* button.
 4. In the *Select Device* dialog, click *Creative GB0012*, and then click the *OK* button.
 5. On the *Insert Disk* message, click the *OK* button without inserting a CD.
 6. If 3D Blaster Annihilator 2 drivers and later versions of DirectX drivers are already installed, click the *Skip File* button until the *Adapter Type* group or the *Adapter* tab page appears.
 7. Click the *Close* button twice to close the *Display Properties* dialog.
 8. When prompted to restart your system, click the *Yes* button.
- After you have restarted your system, the newer DirectX drivers will work with the latest 3D Blaster Annihilator 2 drivers.

OpenGL Applications

When starting OpenGL Screen Saver or applications in Windows 98, the message “No local buffer memory available” appears.

Solution *Set a lower resolution and color depth:*

1. Right-click your desktop, and then click *Properties* on the shortcut menu.
2. In the *Display Properties* dialog, click the *Settings* tab.
3. In the *Desktop Area* group, move the slider to set a lower resolution.
4. In the *Color Palette* group, set to 640x480 and 16-bit color (high color) for OpenGL applications to work properly.

OpenGL applications run uncharacteristically slowly in Windows 98.

Cause OpenGL applications do not support Windows 98’s multi-monitor feature. Consequently, Windows 98 disables all hardware acceleration when the multi-monitor option is enabled.

Solution *Disable the multi-monitor option:*

1. Right-click your desktop, and then click *Properties* on the shortcut menu.
2. In the *Display Properties* dialog, click the *Settings* tab.
3. Clear the “*Extend my Windows desktop onto this monitor*” check box.

PCI Bridge (Windows 95)

After installing 3D Blaster Annihilator 2 in a Pentium II LX system or any other AGP system, the Resources tab page of the 3D Blaster Annihilator 2 Properties dialog in Windows 95 shows resource conflicts similar to the following:

Memory Range used FEDC0000 - FEDDFFFF used by PCI standard PCI-to-PCI bridge.

Memory Range used FD800000 - FDFFFFFF used by PCI standard PCI-to-PCI bridge.

Memory Range used FE000000 - FE7FFFFF used by PCI standard PCI-to-PCI bridge.

Cause The “PCI standard PCI-to-PCI bridge” is the CPU chipset to AGP controller, which Windows 95 cannot identify properly.

Solution No action required.
A conflict between the AGP video controller and the “PCI standard PCI-to-PCI bridge” in the Windows 95 Device Manager does not affect the functionality of the AGP card. This problem is common to all AGP graphics cards and does not affect 3D Blaster Annihilator 2’s functionality. It has been resolved in Windows 98.

AGP Aperture Size



Changing settings in CMOS incorrectly can cause the system to stop functioning.



Some of the steps from step 3 onwards may not apply to your operating system’s CMOS. Refer to your system’s CMOS documentation for more details.

DirectDraw/Direct3D fails to use hardware acceleration (HAL).

Cause The CMOS setting for the AGP Aperture size is less than 8 MB.

Solution Set the AGP Aperture size to 8 MB or more.

Do the following in CMOS:

1. Restart your computer.
2. During the memory check, press the *DELETE* key. The CMOS setup menu appears.
3. Select Chipset Features Setup and press the *ENTER* key.
4. Set the AGP Aperture Size (MB) to 8 MB or more.
5. Press the *ESCAPE* (Esc) key to return to the CMOS setup menu.
6. Select *Save & Exit Setup*, and press the *ENTER* key.
7. Press the *Y* key and then press the *ENTER* key.

Creative End-User Software License Agreement

Version 2.4, June 2000

PLEASE READ THIS DOCUMENT CAREFULLY BEFORE INSTALLING THE SOFTWARE. BY INSTALLING AND USING THE SOFTWARE, YOU AGREE TO BE BOUND BY THE TERMS OF THIS AGREEMENT. IF YOU DO NOT AGREE TO THE TERMS OF THE AGREEMENT, DO NOT INSTALL OR USE THE SOFTWARE. PROMPTLY RETURN, WITHIN 15 DAYS, THE SOFTWARE, ALL RELATED DOCUMENTATION AND ACCOMPANYING ITEMS TO THE PLACE OF ACQUISITION FOR A FULL REFUND.

This is a legal agreement between you and **Creative Technology Ltd.** and its subsidiaries ("Creative"). This Agreement states the terms and conditions upon which Creative offers to license the software sealed in the disk package together with all related documentation and accompanying items including, but not limited to, the executable programs, drivers, libraries and data files associated with such programs (collectively, the "Software").

LICENSE

1. Grant of License

The Software is licensed, not sold, to you for use only under the terms of this Agreement. You own the disk or other media on which the Software is originally or subsequently recorded or fixed; but, as between you and Creative (and, to the extent applicable, its licensors), Creative retains all title to and ownership of the Software and reserves all rights not expressly granted to you.

2. For Use on a Single Computer

The Software may be used only on a single computer by a single user at any time. You may transfer the machine-readable portion of the Software from one computer to another computer, provided that (a) the Software (including any portion or copy thereof) is erased from the first computer and (b) there is no possibility that the Software will be used on more than one computer at a time.

3. Stand-Alone Basis

You may use the Software only on a stand-alone basis, such that the Software and the functions it provides are accessible only to persons who are physically present at the location of the computer on which the Software is loaded. You may not allow the Software or its functions to be accessed remotely, or transmit all or any portion of the Software through any network or communication line.

4. Copyright

The Software is owned by Creative and/or its licensees and is protected by United States copyright laws and international treaty provisions. You may not remove the copyright notice from any copy of the Software or any copy of the written materials, if any, accompanying the Software.

5. One Archival Copy

You may make one (1) archival copy of the machine-readable portion of the Software for backup purposes only in support of your use of the Software on a single computer, provided that you reproduce on the copy all copyright and other proprietary rights notices included on the originals of the Software.

6. No Merger or Integration

You may not merge any portion of the Software into, or integrate any portion of the Software with, any other program, except to the extent expressly permitted by the laws of the jurisdiction where you are located. Any portion of the Software merged into or integrated with another program, if any, will continue to be subject to the terms and conditions of this Agreement, and you must reproduce on the merged or integrated portion all copyright and other proprietary rights notices included in the originals of the Software.

7. Network Version

If you have purchased a "network" version of the Software, this Agreement applies to the installation of the Software on a single "file server". It may not be copied onto multiple systems. Each "node" connected to the "file server" must also have its own license of a "node copy" of the Software, which becomes a license only for that specific "node".

8. Transfer of License

You may transfer your license of the Software, provided that (a) you transfer all portions of the Software or copies thereof, (b) you do not retain any portion of the Software or any copy thereof, and (c) the transferee reads and agrees to be bound by the terms and conditions of this Agreement.

9. Limitations on Using, Copying, and Modifying the Software

Except to the extent expressly permitted by this Agreement or by the laws of the jurisdiction where you acquired the Software, you may not use, copy or modify

the Software. Nor may you sub-license any of your rights under this Agreement. You may use the Software for your personal use only, and not for public performance or for the creation of publicly displayed videotapes.

10. Decompiling, Disassembling, or Reverse Engineering

You acknowledge that the Software contains trade secrets and other proprietary information of Creative and its licensors. Except to the extent expressly permitted by this Agreement or by the laws of the jurisdiction where you are located, you may not decompile, disassemble or otherwise reverse engineer the Software, or engage in any other activities to obtain underlying information that is not visible to the user in connection with normal use of the Software.

11. For Software with CDDB features

This package contains software from CDDB, Inc. of Berkeley California ("CDDB"). The software from CDDB (the "CDDB Client") enables this application to do online disc identification and obtain music-related information, including name, artist, track and title information ("CDDB Data") from online servers ("CDDB Servers") and to perform other functions.

You agree that you will use CDDB Data, the CDDB Client and CDDB Servers for your own personal non-commercial use only. You agree not to assign, copy, transfer or transmit the CDDB Client or any CDDB Data to any third party. **YOU AGREE NOT TO USE OR EXPLOIT CDDB DATA, THE CDDB CLIENT, OR CDDB SERVERS, EXCEPT AS EXPRESSLY PERMITTED HEREIN.**

You agree that your non-exclusive license to use the CDDB Data, the CDDB Client and CDDB Servers will terminate if you violate these restrictions. If your license terminates, you agree to cease any and all use of the CDDB Data, the CDDB Client and CDDB Servers. CDDB reserves all rights in CDDB Data, the CDDB Client and the CDDB Servers, including all ownership rights. You agree that CDDB, Inc. may enforce its rights under this Agreement against you directly in its own name.

The CDDB Client and each item of CDDB Data are licensed to you "AS IS." CDDB makes no representations or warranties, express or implied, regarding the accuracy of any CDDB Data from in the CDDB Servers. CDDB reserves the right to delete data from the CDDB Servers or to change data categories for any cause that CDDB deems sufficient. No warranty is made that the CDDB Client or CDDB Servers are error-free or that functioning of CDDB Client or CDDB Servers will be uninterrupted. CDDB is not obligated to provide you with any new enhanced or additional data types or categories that CDDB may choose to provide in the future.

CDDB DISCLAIMS ALL WARRANTIES EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. CDDB does not warrant the results that will be obtained by your use of the CDDB Client or any CDDB Server. **IN NO CASE WILL CDDB BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES OR FOR ANY LOST PROFITS, OR LOST REVENUES.**

In particular, you agree not for any purpose to transmit the Software or display the Software's object code on any computer screen or to make any hardcopy memory dumps of the Software's object code. If you believe you require information related to the interoperability of the Software with other programs, you shall not decompile or disassemble the Software to obtain such information, and you agree to request such information from Creative at the address listed below. Upon receiving such a request, Creative shall

determine whether you require such information for a legitimate purpose and, if so, Creative will provide such information to you within a reasonable time and on reasonable conditions.

In any event, you will notify Creative of any information derived from reverse engineering or such other activities, and the results thereof will constitute the confidential information of Creative that may be used only in connection with the Software.

TERMINATION

The license granted to you is effective until terminated. You may terminate it at any time by returning the Software (including any portions or copies thereof) to Creative. The license will also terminate automatically without any notice from Creative if you fail to comply with any term or condition of this Agreement. You agree upon such termination to return the Software (including any portions or copies thereof) to Creative. Upon termination, Creative may also enforce any rights provided by law. The provisions of this Agreement that protect the proprietary rights of Creative will continue in force after termination.

LIMITED WARRANTY

Creative warrants, as the sole warranty, that the disks on which the Software is furnished will be free of defects, as set forth in the Warranty Card or printed manual included with the Software. No distributor, dealer or any other entity or person is authorized to expand or alter this warranty or any other provisions of this Agreement. Any representation, other than the warranties set forth in this Agreement, will not bind Creative.

Creative does not warrant that the functions contained in the Software will meet your requirements or that the operation of the Software will be uninterrupted, error-free or free from malicious code. For purposes of this paragraph, "malicious code" means any program code designed to contaminate other computer programs or computer data, consume computer resources, modify, destroy, record, or transmit data, or in some other fashion usurp the normal operation of the computer, computer system, or computer network, including viruses, Trojan horses, droppers, worms, logic bombs, and the like. **EXCEPT AS STATED ABOVE IN THIS AGREEMENT, THE SOFTWARE IS PROVIDED AS-IS WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. CREATIVE IS NOT OBLIGATED TO PROVIDE ANY UPDATES, UPGRADES OR TECHNICAL SUPPORT FOR THE SOFTWARE.**

Further, Creative shall not be liable for the accuracy of any information provided by Creative or third party technical support personnel, or any damages caused, either directly or indirectly, by acts taken or omissions made by you as a result of such technical support.

You assume full responsibility for the selection of the Software to achieve your intended results, and for the installation, use and results obtained from the Software. You also assume the entire risk as it applies to the quality and performance of the Software. Should the Software prove defective, you (and not Creative, or its distributors or dealers) assume the entire cost of all necessary servicing, repair or correction.

This warranty gives you specific legal rights, and you may also have other rights which vary from country/state to country/state. Some countries/states do not allow the exclusion of implied warranties, so the above exclusion may not apply to you. Creative disclaims all warranties of any kind if the Software was customized, repackaged or altered in any way by any third party other than Creative.

LIMITATION OF REMEDIES AND DAMAGES

THE ONLY REMEDY FOR BREACH OF WARRANTY WILL BE THAT SET FORTH IN THE WARRANTY CARD OR PRINTED MANUAL INCLUDED WITH THE SOFTWARE. IN NO EVENT WILL CREATIVE OR ITS LICENSORS BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES OR FOR ANY LOST PROFITS, LOST SAVINGS, LOST REVENUES OR LOST DATA ARISING FROM OR RELATING TO THE SOFTWARE OR THIS AGREEMENT, EVEN IF CREATIVE OR ITS LICENSORS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT WILL CREATIVE'S LIABILITY OR DAMAGES TO YOU OR ANY OTHER PERSON EVER EXCEED THE AMOUNT PAID BY YOU FOR THE SOFTWARE, REGARDLESS OF THE FORM OF THE CLAIM.

Some countries/states do not allow the limitation or exclusion of liability for incidental or consequential damages, so the above limitation or exclusion may not apply to you.

PRODUCT RETURNS

If you must ship the software to Creative or an authorized Creative distributor or dealer, you must prepay shipping and either insure the software or assume all risk of loss or damage in transit.

U.S. GOVERNMENT RESTRICTED RIGHTS

All Software and related documentation are provided with restricted rights. Use, duplication or disclosure by the U.S. Government is subject to restrictions as set forth in subdivision (b)(3)(ii) of the Rights in Technical Data and Computer Software Clause at 252.227-7013. If you are sub-licensing or using the Software outside of the United States, you will comply with the applicable local laws of your country, U.S. export control law, and the English version of this Agreement.

CONTRACTOR/MANUFACTURER

The Contractor/Manufacturer for the Software is:

Creative Technology Ltd
31, International Business Park
Creative Resource
Singapore 609921

GENERAL

This Agreement is binding on you as well as your employees, employers, contractors and agents, and on any successors and assignees. Neither the Software nor any information derived therefrom may be exported except in accordance with the laws of the U.S. or other applicable provisions. This Agreement is governed by the laws of the State of California (except to the extent federal law governs copyrights and federally registered trademarks). This Agreement is the entire agreement between us and supersedes any other understandings or agreements, including, but not limited to, advertising, with respect to the Software. If any provision of this Agreement is deemed invalid or unenforceable by any country or government agency having jurisdiction, that particular provision will be deemed modified to the extent necessary to make the provision valid and enforceable, and the remaining provisions will remain in full force and effect.

For questions concerning this Agreement, please contact Creative at the address stated above. For questions on product or technical matters, contact the Creative technical support center nearest you.

ADDENDUM TO THE MICROSOFT SOFTWARE LICENSE AGREEMENT (WINDOWS 95)

IMPORTANT: By using the Microsoft software files (the “Microsoft Software”) provided with this Addendum, you are agreeing to be bound by the following terms. If you do not agree to be bound by these terms, you may not use the Microsoft Software.

The Microsoft Software is provided for the sole purpose of replacing the corresponding files provided with a previously licensed copy of the Microsoft software product identified above (“ORIGINAL PRODUCT”). Upon installation, the Microsoft Software files become part of the ORIGINAL PRODUCT and are subject to the same warranty and license terms and conditions as the ORIGINAL PRODUCT. If you do not have a valid license to use the ORIGINAL PRODUCT, you may not use the Microsoft Software. Any other use of the Microsoft Software is prohibited.

SPECIAL PROVISIONS APPLICABLE TO THE EUROPEAN UNION

IF YOU ACQUIRED THE SOFTWARE IN THE EUROPEAN UNION (EU), THE FOLLOWING PROVISIONS ALSO APPLY TO YOU. IF THERE IS ANY INCONSISTENCY BETWEEN THE TERMS OF THE SOFTWARE LICENSE AGREEMENT SET OUT EARLIER AND IN THE FOLLOWING PROVISIONS, THE FOLLOWING PROVISIONS SHALL TAKE PRECEDENCE.

DECOMPILATION

You agree not for any purpose to transmit the Software or display the Software’s object code on any computer screen or to make any hard copy memory dumps of the Software’s object code. If you believe you require information related to the interoperability of the Software with other programs, you shall not decompile or disassemble the Software

to obtain such information, and you agree to request such information from Creative at the address listed earlier. Upon receiving such a request, Creative shall determine whether you require such information for a legitimate purpose and, if so, Creative will provide such information to you within a reasonable time and on reasonable conditions.

LIMITED WARRANTY
EXCEPT AS STATED EARLIER IN THIS AGREEMENT, AND AS PROVIDED UNDER THE HEADING “STATUTORY RIGHTS”, THE SOFTWARE IS PROVIDED AS-IS WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, QUALITY AND FITNESS FOR A PARTICULAR PURPOSE.

LIMITATION OF REMEDY AND DAMAGES
THE LIMITATIONS OF REMEDIES AND DAMAGES IN THE SOFTWARE LICENSE AGREEMENT SHALL NOT APPLY TO PERSONAL INJURY (INCLUDING DEATH) TO ANY PERSON CAUSED BY CREATIVE’S NEGLIGENCE AND ARE SUBJECT TO THE PROVISION SET OUT UNDER THE HEADING “STATUTORY RIGHTS”.

STATUTORY RIGHTS

Irish law provides that certain conditions and warranties may be implied in contracts for the sale of goods and in contracts for the supply of services. Such conditions and warranties are hereby excluded, to the extent such exclusion, in the context of this transaction, is lawful under Irish law. Conversely, such conditions and warranties, insofar as they may not be lawfully excluded, shall apply.

Accordingly nothing in this Agreement shall prejudice any rights that you may enjoy by virtue of Sections 12, 13, 14 or 15 of the Irish Sale of Goods Act 1893 (as amended).

GENERAL

This Agreement is governed by the laws of the Republic of Ireland. The local language version of this agreement shall apply to Software acquired in the EU. This Agreement is the entire agreement between us, and you agree that Creative will not have any liability for any untrue statement or representation made by it, its agents or anyone else (whether innocently or negligently) upon which you relied upon entering this Agreement, unless such untrue statement or representation was made fraudulently.

Safety & Regulatory Information

The following sections contain notices for various countries:

CAUTION: This device is intended to be connected by the user to a CSA/TUV/UL certified/listed IBM AT or compatible personal computers in the manufacturer’s defined operator access area. Check the equipment operating/installation manual and/or with the equipment manufacturer to verify/confirm if your equipment is suitable for devices to be connected to it.

ATTENTION: Ce périphérique est destiné à être connecté par l’utilisateur à un ordinateur IBM AT certifié ou listé CSA/TUV/UL ou compatible, à l’intérieur de la zone d’accès définie par le fabricant. Consulter le mode d’emploi/guide d’installation et/ou le fabricant de l’appareil pour vérifier ou confirmer qu’il est possible de connecter d’autres périphériques à votre système.

Notice for the USA

FCC Part 15: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, this notice is not a guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the distance between the equipment and receiver.

- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician.
- Caution

To comply with the limits for the Class B digital device, pursuant to Part 15 of the FCC Rules, this device must be installed in computer equipment certified to comply with the Class B limits.

All cables used to connect the computer and peripherals must be shielded and grounded. Operation with non-certified computers or non-shielded cables may result in interference to radio or television reception.

Modifications

Any changes or modifications not expressly approved by the grantee of this device could void the user’s authority to operate the device.

Notice for Canada

This apparatus complies with the Class “B” limits for radio interference as specified in the Canadian Department of Communications Radio Interference Regulations.

Cet appareil est conforme aux normes de CLASSE “B” d’interférence radio tel que spécifié par le Ministère Canadien des Communications dans les règlements d’interférence radio.

Compliance

- This product conforms to the following Council Directive:
Directive 89/336/EEC, 92/31/EEC (EMC), 73/23/EEC (LVD)
Directive 89/336/EEC, 92/31/EEC (EMC), 73/23/EEC (LVD)

Declaration of Conformity

According to the FCC96 208 and ET95-19 documents,

Name: **Creative Labs Inc.**
Address: **1901 McCarthy Boulevard
Milpitas, CA. 95035
United States
Tel: (408) 428-6600**

declares under its sole responsibility that the product

Trade Name: **Creative Labs**

Model Number: **GB0012**

has been tested according to the FCC / CISPR22/85 requirements for Class B devices and found compliant with the following standards:

EMI/EMC: ANSI C63.4 1992, FCC Part 15 Subpart B
This device complies with part 15 of the FCC Rules.
Operation is subject to the following two conditions:
1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesirable operation.

Ce matériel est conforme à la section 15 des règles FCC. Son Fonctionnement est soumis aux deux conditions suivantes:

- Le matériel ne peut être source D’interférences et
- Doit accepter toutes les interférences reçues, Y compris celles pouvant provoquer un fonctionnement indésirable.

**Compliance Manager
Creative Labs, Inc.
21 September, 2000**

No part of this publication may be reproduced or transmitted in any form or by any means without the prior written consent of Creative Technology Ltd.

Copyright © 2000 Creative Technology Ltd. All rights reserved.

Version 1.0 (CLI)

October 2000

Creative, the Creative Logo and Blaster are trademarks and Annihilator and BlasterControl are trademarks of Creative in the United States and /or other countries.

NVIDIA and GeForce2 GTS are trademarks of NVIDIA Corporation.

Other company and product names may be trademarks or registered trademarks of the respective companies with which they are associated.